SUBMIT SUBMIT

## **SUBMIT**

File	200
Op-Sys	OS/390, VSE/ESA, BS2000/OSD
Statement	PROCESS
Task	This view allows you or a program to submit a job to the operating system. The job to be submitted can reside on disk or in storage. For BS2000/OSD, the job can also be a library element (LMS). It is also possible to pass the job's JCL to the Entire System Server on a card-by-card basis. See also SUBMIT Programming Notes at the bottom of this view description.

#### **Common Fields for all Operating Systems**

Dictionary Field Name	F/L	Mu	DE	Remarks
ERROR-CODE	N3			
ERROR-TEXT	A58			
NODE	N5		D	
NODE-NAME	A16		D	
SYSTEM-MESSAGE-CODE	A10			
CARD	A80		D	Required if no DSNAME / MEMBER is given.
JOB-NUMBER	N7		D	
JOB-ID	A8		D	
DSNAME	A54		D	Required if no CARD is given.
PASSWORD	A8		D	Not for VSE/ESA
FUNCTION	A8		D	Required for the last submit request.
IDENTIFIER	A8		D	Required with multiple parallel submit calls.
JOB-NAME	A8		D	

## **Additional Fields Supported for OS/390**

Dictionary Field Name	F/L	Mu	DE	Remarks
FROM-NODE	N5		D	
FROM-USERID	A8		D	
FROM-USER-PASSWORD	A8		D	
MEMBER	A10		D	Required
VOLSER	A6		D	Required only if dataset is not cataloged.
PRODUCT	A1		D	
OPTIONS	A8		D	

# Additional Fields Supported for VSE/ESA

Dictionary Field Name	F/L	Mu	DE	Remarks
JOB-NAME	A8		D	
FROM-NODE	N3		D	
MEMBER	A10		D	Required.
VOLSER	A6		D	Required only if file not known to Entire System Server.
LIBRARY	A8		D	Required.
SUB-LIBRARY	A8		D	Required.
MEMBER-TYPE	A8		D	Required.
TARGET-NODE-NAME	A8		D	
TARGET-USER-REMOTE-ID	A8		D	
VSAM-CATALOG	A8		D	Required if VSAM-controlled Librarian file.

## Additional Fields Supported for BS2000/OSD

SUBMIT Relevant Error Codes

Dictionary Field Name	F/L	Mu	DE	Remarks
SYSTEM-CODE	B2			
PRODUCT	A1		D	
ELEMENT	A64		D	
ELEMENT-PASSWORD	A8		D	
USERID	A8		D	
ACCOUNT-NUMBER	A8		D	
TIME	A5		D	
ERASE-AFTER-RUN	A3		D	
MONITOR-JOB-VARIABLE	A54		D	
JOB-VARIABLE-PASSWORD	A4		D	
USER-PASSWORD	A8		D	
JOB-CLASS	A8		D	
JOB-PRIORITY	A3		D	
RUN-PRIORITY	A3		D	
START-OPTION	A17		D	
START-DATE	A8		D	
START-TIME	A5		D	
START-DATX	D		D	
START-TIMX	Т		D	
REPEAT-OPTION	A17		D	
REPEAT-TIME	A5		D	

#### **Relevant Error Codes**

Field Descriptions SUBMIT

Code	Text	OS/390	VSE/ESA	BS2000/OSD
500	VSAM error.	X		
530	Access denied by Security Facility.			X
531	Password missing or incorrect.			X
556	File is in use.			X
565	Syntax error in dataset name.			X
692	You are not permitted to access member.			X
699	GETVIS failed.	X	X	
701	DSNAME missing.			X
732	Account number missing.			X
733	User ID does not exist.			X
756	Job variable name missing or invalid.			X
758	User ID is missing.			X
772	Requested dataset not found.			X
799	Entire System Server internal error.			X
856	Operator unable to mount volume.			X
883	Dataset is full.			X
889	Permanent I/O error while writing dataset.			X
899	I/O error during read.	X		
901	Alloc of reader failed.	X	X	
902	Dynamic alloc failed.	X	X	
903	Dynamic allocation failed for temporary dataset.			X
909	Syntax error in JCL command.			X
991	Unknown product.			X
992	Requested job variable not found.			X
993	Open error.	X	X	X
998	Member not found.			X

# **Field Descriptions**

Field Name	Type/Length	<b>Operating System</b>
ACCOUNT-NUMBER	(A8)	BS2000/OSD

Account number for the job.

Field Name	Type/Length	Operating System
CARD	(A80)	OS/390, VSE/ESA, BS2000/OSD

SUBMIT Field Descriptions

JCL record to be sent from Natural to the internal reader.

Field Name	Type/Length	Operating System
DSNAME	(A54)	OS/390, VSE/ESA, BS2000/OSD

Fully qualified dataset or file name containing the JCL to be submitted. To perform the submit, a second SUBMIT request with FUNCTION=CLOSE is required.

Field Name	Type/Length	<b>Operating System</b>
ELEMENT	(A64)	BS2000/OSD

Element from which cards are to be submitted.

Field Name	Type/Length	<b>Operating System</b>
ELEMENT-PASSWORD	(A8)	BS2000/OSD

Password for protected LMS element (LMS V2 or above).

Field Name	Type/Length	<b>Operating System</b>
ERASE-AFTER-RUN	(A3)	BS2000/OSD

Value	Explanation
NO	Do not erase Enter file after run.
YES	Erase Enter file after run.

Field Name	Type/Length	<b>Operating System</b>
FROM-NODE	(N5)	OS/390, VSE/ESA

Entire System Server node on which the JCL from the job is to be read.

Field Name	Type/Length	<b>Operating System</b>
FROM-USERID	(A8)	OS/390

User ID in the FROM-NODE.

Field Name	Type/Length	<b>Operating System</b>
FROM-USER-PASSWORD	(A8)	OS/390

User password in the FROM-NODE.

Field Name	Type/Length	Operating System
FUNCTION	(A8)	OS/390, VSE/ESA, BS2000/OSD

Field Descriptions SUBMIT

Function to be performed. Possible options:

Option	Explanation
<blank></blank>	Default. Pass a JCL card or the name of the dataset or member/element to be submitted to the Entire System Server.
CLOSE	All cards have been processed - perform the submit. You must specify this function for the last SUBMIT request.

Field Name	Type/Length	Operating System
IDENTIFIER	(A8)	OS/390, VSE/ESA, BS2000/OSD

Required if multiple submit calls are executing in parallel, as requests for the same job to be submitted must have the same identifier.

Field Name	Type/Length	<b>Operating System</b>
JOB-CLASS	(A8)	BS2000/OSD

Name of the job class where the job is to run.

Field Name	Type/Length	Operating System
JOB-ID	(A8)	OS/390, VSE/ESA, BS2000/OSD

Same as JOB-NUMBER, only in alpha format.

Field Name	Type/Length	Operating System
JOB-NAME	(A8)	OS/390, VSE/ESA, BS2000/OSD

Name of job to be submitted.

Field Name	Type/Length	Operating System
JOB-NUMBER	(N7)	OS/390, VSE/ESA, BS2000/OSD

This field is returned after a call with FUNCTION=CLOSE.

OS/390 & VSE/ESA:	Job number assigned by the JES (OS/390) or POWER (VSE/ESA). If JOB-NUMBER=0, no valid job card was sent.
BS2000/OSD:	This field contains the TSN of the submitted job, if the TSN is numeric. In case of error, the field contains 0.

Field Name	Type/Length	<b>Operating System</b>
JOB-PRIORITY	(A3)	BS2000/OSD

SUBMIT Field Descriptions

Scheduling priority for job. Possible values are between 9 and the maximum of the job class, or STD. STD is the default.

Field Name	Type/Length	<b>Operating System</b>
JOB-VARIABLE-PASSWORD	(A4)	BS2000/OSD

Password for protected monitoring job variable.

Field Name	Type/Length	<b>Operating System</b>
LIBRARY	(A8)	VSE/ESA

Name of library.

Field Name	Type/Length	<b>Operating System</b>
MEMBER	(A10)	OS/390, VSE/ESA

Name of member that contains the JCL to be submitted.

Field Name	Type/Length	<b>Operating System</b>
MEMBER-TYPE	(A8)	VSE/ESA

Member type.

Field Name	Type/Length	<b>Operating System</b>
MONITOR-JOB-VARIABLE	(A54)	BS2000/OSD

Specifies the name of a monitoring job variable that always contains the job status:

Job Status	Explanation	
\$A	Job abended.	
\$R	Job is running.	
\$S	Job is in input queue.	
\$T	Job terminated normally.	

Field Name	Type/Length	<b>Operating System</b>
OPTIONS	(A8)	OS/390

Specify **X** to expand all ++INCLUDE statements.

Field Name	Type/Length	<b>Operating System</b>
PASSWORD	(A8)	OS/390, BS2000/OSD

Field Descriptions SUBMIT

Password for protected dataset.

Field Name	Type/Length	<b>Operating System</b>
PRODUCT	(A1)	OS/390, BS2000/OSD

Access method for dataset containing the JCL. Possible options:

Option	Explanation
L	CA-Librarian
M	LMS (BS2000/OSD)
P	CA-Panvalet

Field Name	Type/Length	<b>Operating System</b>
REPEAT-OPTION	(A17)	BS2000/OSD

Specifies repeated job runs. Possible options:

Option	Explanation
AT-STREAM-STARTUP	Job is repeated at every scheduler startup.
DAILY	Job runs daily.
NO	Job is not repeated.
PERIOD	Specifies time interval for repeat runs.
STD	Default. Take the job class default.
WEEKLY	Job runs weekly.

Time given in REPEAT-TIME.

Field Name	Type/Length	<b>Operating System</b>
REPEAT-TIME	(A5)	BS2000/OSD

Specifies time for repeat runs (see REPEAT-OPTION).

Field Name	Type/Length	<b>Operating System</b>
RUN-PRIORITY	(A3)	BS2000/OSD

Priority during job execution. The value can be between job class maximum and 255, or STD. STD is the default and is also used if the RUN-PRIORITY value is invalid.

Field Name	Type/Length	<b>Operating System</b>
START-DATE	(A8)	BS2000/OSD

SUBMIT Field Descriptions

Start date value in format YY-MM-DD.

Field Name	Type/Length	<b>Operating System</b>
START-DATX	(D)	BS2000/OSD

Start date in Natural format.

Field Name	Type/Length	<b>Operating System</b>
START-OPTION	(A17)	BS2000/OSD

Specifies start of job. Possible options:

Option	Explanation
AT	Start at given time and/or date.
AT-STREAM-STARTUP	Start job at the start of the scheduler.
EARLIEST	Do not start before this date and/or time.
IMMEDIATELY	Start now.
LATEST	Do not start after this date and/or time.
SOON	As soon as possible.
STD	Default. Use job class default.
WITHIN	Specifies a time range.

The starting date and/or time are given in the fields START-DATE and START-TIME.

Field Name	Type/Length	<b>Operating System</b>
START-TIME	(A5)	BS2000/OSD

Start time value in format HH:MM.

Field Name	Type/Length	<b>Operating System</b>
START-TIMX	(T)	BS2000/OSD

Start time in Natural format.

Field Name	Type/Length	<b>Operating System</b>
SUB-LIBRARY	(A8)	VSE/ESA

Name of sublibrary.

Field Name	Type/Length	<b>Operating System</b>
TARGET-NODE-NAME	(A8)	VSE/ESA

Name of the node to which the POWER output is to be spooled.

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Field Name	Type/Length	<b>Operating System</b>
TARGET-USER-REMOTE-ID	(A8)	VSE/ESA

Name of the user/remote to which the POWER output is to be spooled.

Field Name	Type/Length	<b>Operating System</b>
TIME	(A5)	BS2000/OSD

Maximum CPU time the job may consume. Possible values:

Value	Explanation
t	Time value in seconds
NTL	No Time Limit
STD	Default. As defined in the job class.

Field Name	Type/Length	<b>Operating System</b>
USERID	(A8)	BS2000/OSD

User ID under which the job is to be submitted.

Field Name	Type/Length	<b>Operating System</b>
USER-PASSWORD	(A8)	BS2000/OSD

Password belonging to the user ID under which the job is to be started.

Field Name	Type/Length	<b>Operating System</b>
VOLSER	(A6)	OS/390, VSE/ESA

Volume serial number. Required only if the dataset is not cataloged.

Field Name	Type/Length	<b>Operating System</b>
VSAM-CATALOG	(A8)	VSE/ESA

Name of VSAM catalog where the library is kept.

#### **SUBMIT Programming Notes**

SUBMIT is an UPDATE view, i.e., data is transmitted from the Natural program (CLIENT side) to ESY (server side).

The Entire System Server view SUBMIT returns codes and messages which describe whether the requested operation has been executed successfully or not, and the JOB-NUMBER of a submitted job.

Therefore, the DEFINE DATA section of the Natural program should only contain the fields shown in the following example:

SUBMIT Programming Notes

160 1 SUBMIT VIEW OF SUBMIT170 2 ERROR-CODE180 2 ERROR-TEXT190 2 SYSTEM-MESSAGE-CODE200 2 SYSTEM-CODE210 2 JOB-NUMBER

These fields in DEFINE DATA are the fields returned from the SUBMIT view in Entire System Server to the calling Natural program.

Defining other fields in the DDM is not critical, but the access to these fields may lead to unpredictible results.

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